

Testimony of General (Retired) Wesley Clark

Co-Chairman, Growth Energy

Before the Senate Environment and Public Works
Committee

December 11, 2013

Chairman Boxer, Ranking Member Vitter and all the members of the Committee, thank you for the opportunity to present testimony on the Renewable Fuel Standard.

I am retired U.S. Army General Wesley Clark, Co-chairman of Growth Energy, the country's leading trade association of ethanol and renewable fuel producers. Growth Energy represents 80 ethanol plants in 14 states and 81 associate members involved in the value chain of producing ethanol. Our plants produce ethanol from grain and are leaders in innovating in second-generation fuels from sources like plant wastes and algae.

Prior to my advocacy on renewable fuels, I spent almost 40 years in our nation's armed forces and have spent a majority of my time outside of the military discussing our nation's foreign policy and threats overseas. I can say without hesitation that our nation's addiction to foreign oil is one of the biggest issues facing our nation – even with newfound domestic supplies of oil and natural gas.

One of the biggest reasons why Congress passed and President Bush signed into law the Renewable Fuel Standard was because of this dangerous addiction to foreign oil. And it has worked. Since 2005, our dependence on foreign oil has decreased from 60 percent to 40 percent, a 33 percent reduction.

More efficient automobiles and increased oil production have absolutely played a role in this, but let's look at the increase in biofuels compared to the increase in oil production. From 2005 to 2012, U.S. oil production has increased by roughly 25 percent on the back of newfound oil resources. In that same time period, ethanol production has increased by 240 percent, and biodiesel production has increased by 880 percent.

My message to the Committee is this: the Renewable Fuel Standard (RFS) is an overwhelming success. It has reduced our dependence on foreign oil and made our nation more energy independent, created American jobs, revitalized rural America, injected much-needed competition into a monopolized vehicle fuels market, lowered the price at the pump, and improved the environment. That is a great record of accomplishment – one that I would call a brilliant success. It is wise policy, and a tribute to its bipartisan passage.

In particular, the RFS:

- Is one of the key components that have helped lower our dependence on foreign oil by 33 percent.
- Has cracked the monopolistic stranglehold that petroleum-based fuels have on our transportation system, injecting much needed competition and providing drivers a choice at the pump.
- Supports 400,000 American jobs and generates \$42 billion in economic activity.
- Lowered the price at the pump for all American drivers. Wholesale ethanol was 73 cents less expensive than regular gasoline at the close of business on Friday, and has been a dollar at some points this year.

These are real, tangible results that benefit every American today. But if some had their way, we'd throw all of this progress away so the incumbents can shut out competition and maintain their stranglehold on the wallets of American drivers so that Americans will never escape the burden of imported oil and imported, monopolistic fuel pricing.

We see a different path forward. The Renewable Fuel Standard and higher-level blends of ethanol present the first real opportunity to create fuel diversity in the United States. It has been over 100 years since Americans had a choice in what they use in their automobiles. Now, the oil lobby has begun a sustained, multipronged campaign to kill renewable fuels just as it ramps up and threatens oil's market share.

The premise that America's newfound oil and gas resources mean we no longer need renewable fuels is simply not true. We are this year going to import almost \$400 billion worth of petroleum, the majority from OPEC countries. In addition, in September imports increased by almost 1 million barrels/day. This is to be expected as the economy returns to growth. These imports suck money away from our economy - just like a per capita tax on each and every American of about \$1200.

Biofuels like ethanol keep those funds inside our economy, creating jobs and building communities. Every one percent of ethanol in our fuel supply retains over \$3 billion in our own economy. Today, we are helping retain approximately \$30 billion that would have flowed out of our economy. When we fulfill the full RFS vision in 2022, ethanol and other biofuels will be responsible for keeping almost \$100 billion annually in our economy that would otherwise go to other nations.

Moreover, oil is a global market. We don't control the price. Because ethanol is historically an average of more than 50 cents gallon cheaper than oil, we are further helping hold a lid on gasoline prices.

With the success of the RFS, the United States is on the brink of energy independence and energy diversity. On behalf of Growth Energy, the biofuels industry, and America's rural communities, I urge you stay true to the Renewable Fuel Standard that is working and already showing results while still in its infancy.

The RFS will create true consumer freedom in the fuels market. It has reduced fuel costs for American families, has freed the American taxpayer from having to support the agricultural economy, and spurred significant investments in rural America. My testimony today covers seven key topics:

- Success of the Renewable Fuel Standard (RFS)
- National security benefits of the RFS
- Environmental improvements from the use of biofuels
- How the RFS has revitalized rural economies
- Biofuel production's limited impact on food prices
- The so-called "blend wall"
- How E15 is safe and ready for use

Success of Renewable Fuel Standard (RFS)

The RFS is the bedrock federal policy that has spurred billions of dollars of investment in America's cutting-edge biofuels industry. It has been the primary driver behind the only large-scale, commercially-viable alternative to regular gasoline – ethanol. Because of the forward-looking, long-term nature of the policy, the United States leads the world in innovation in biofuels, attracting investment from around the world. Today, because of the RFS, there are more than 200 ethanol biorefineries across the country and dozens of projects that will make advanced or cellulosic biofuels.

The RFS has provided U.S. drivers with a vehicle fuel that is made up 10 percent biofuel, and that fuel blend is available in all 50 states. If the U.S. ethanol industry were a foreign supplier, only Canada would supply the U.S. with more fuel than the U.S. ethanol industry. This newfound biofuel supply has been a key component in helping reduce our dependence on foreign oil by 33 percent since 2005. Getting rid of the 10 percent of biofuels in our passenger vehicle supply would pose big problems.

Renewable Fuel Standard

How America Can Produce Its Own Fuel

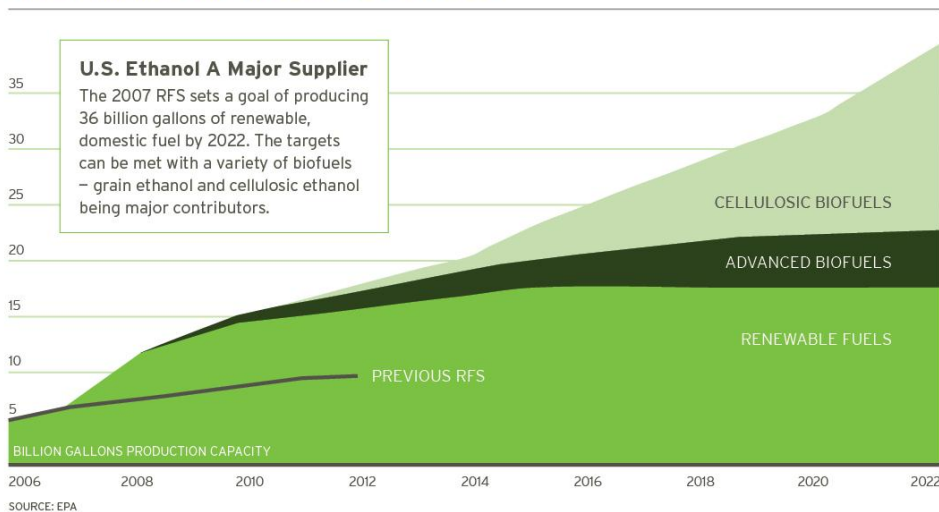


Figure 2

Advanced and cellulosic biofuels research, investment, and development are occurring right now. Growth Energy has several members that are producing these fuels because of the market signal provided by the RFS:

- A cellulosic ethanol plant that is poised to produce the first commercially available cellulosic biofuel from corn stover in early 2014.
- A first of its kind algae bioreactor utilizing carbon dioxide and waste water and has operated it for over two years.
- A project to utilize wood killed by pine beetles as a fuel feedstock.
- Plants that will convert the fiber in the corn kernel into cellulosic ethanol.
- Plants that are using grain sorghum along with biogas from a manure digester to produce an advanced biofuel.

Cellulosic Ethanol

The '50-State' Solution

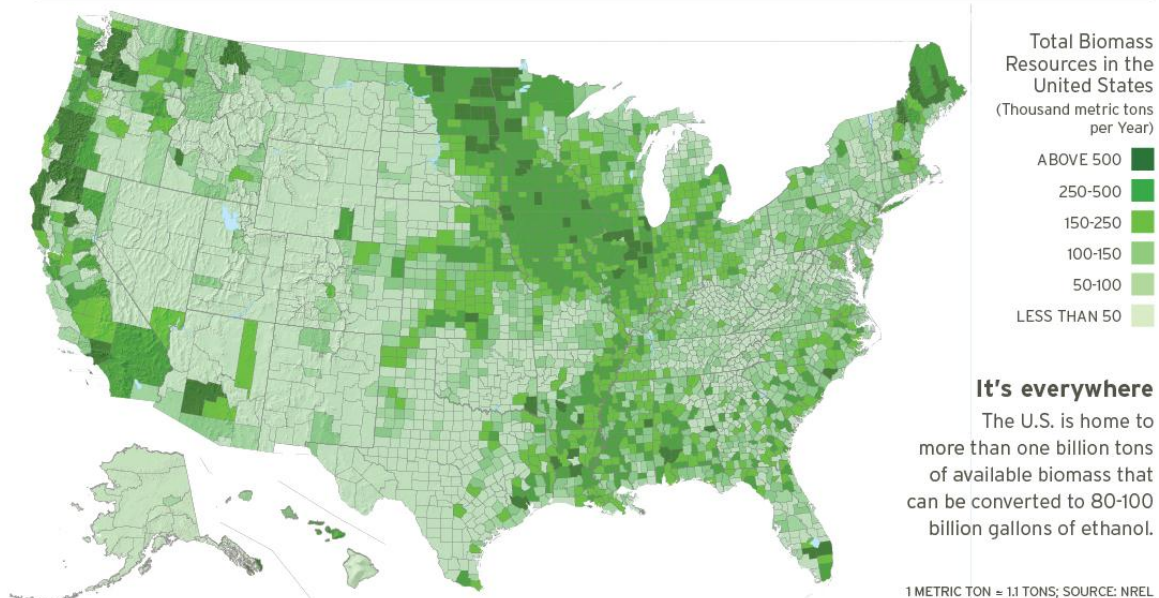


Figure 3

These exciting projects are just among our membership. Advanced and cellulose fuels that are now being developed that will provide benefits and economic opportunity to every state in the nation. Any changes to the RFS will likely kill investment in any advanced or cellulosic fuel project. Changing the RFS puts at risk an entire American-made, American-built industry at a time we can least afford to lose jobs. Changing the RFS risks future research and development of advanced and cellulosic biofuels, which occupy the largest portion of the RFS in the future. We are just five years into a 15-year plan, and we are just three years removed from when the Environmental Protection Agency finalized RFS rules. Any changes to this policy will have devastating effects.

National Security Benefits of the RFS

The U.S. continues to be extremely vulnerable to shocks in the oil supply and price disruptions –from both foreign supply and the domestic supply chain. During the last decade, the price of oil has nearly quadrupled, going from roughly \$25 per barrel in 2001 to nearly \$100 per barrel today; that price disruption has had a significant impact on American consumers and the American economy, with the price of gasoline rising from \$1.09 per gallon in 2001 to roughly \$3.25 per gallon today. Despite significant increases in domestic oil production, we are still importing millions of barrels per day of foreign oil sending more than \$400 billion overseas last year alone. These imports are from a number of

countries in unstable regions, like the Middle East, that have little interest in the United States' energy security (data from the U.S. Energy Information Administration <http://eia.gov>).

We are also spending billions of dollars each year to protect oil supply routes in the Middle East – these costs could be dramatically reduced if we turned to more home-grown renewable ethanol. As an example, according to RAND, the U.S. spends between \$67 and \$83 billion per year protecting global oil interests (“Imported Oil and U.S. National Security”, RAND Corporation, 2009). Critics of renewable fuels point to Canada as our largest source of our imported oil, but even Canada has recently developed assets, such as the Enbridge Northern Gateway Pipeline, aimed at exporting their oil to China rather than exporting to the United States (<http://www.northerngateway.ca/>). Even ExxonMobil acknowledges processing nearly three times as much oil as is produced here in the United States (“What am I paying for in the price of a gallon of gasoline?”, Ken Cohen, January 27, 2012 <http://exxonmobilperspectives.com>).

All of this additional oil is purchased on the global market that is still largely controlled by OPEC. Any time there is a supply disruption or OPEC arbitrarily decides to cut production, it hurts American consumers. We've seen Iran consider choking off the Strait of Hormuz, we've seen workers strike in Venezuela, we've seen pipelines burst, and the list goes on – all of these situations have both impacted the supply of oil and the cost American consumers pay at the pump. Even here in the United States, we have seen refineries taken offline for seasonal maintenance, in the Midwest, thus causing outrageous price increases in Minneapolis and other places across the region (“Pain at the Pump as Gas Prices Soar above \$4”, <http://kstp.com/article/stories/s3034685.shtml>; “Spike in Twin Cities Gas Prices Leaves Drivers Frustrated,” <http://www.startribune.com/business/190374421.html>).

EPA's Misguided Preliminary Rule for 2014 RFS volumes

The EPA proposal sets us back on the path to fulfillment, will chill investment in biofuels, rewards deliberate and willful resistance to the law, and will encourage further and more intensive efforts to gut RFS in the years ahead. It would cause severe harm to farmers, the biofuels industry, and the nation's economy. This proposal is already creating great uncertainty for farmers and other industry investors.

The RFS was approved by a bipartisan majority in Congress and enacted into law nearly six years ago. Since that time, the oil industry has used its considerable power to delay, litigate, and undercut the RFS. Now, by refusing to take any steps to allow higher biofuel blends into the consumer marketplace, the oil industry is claiming the statutory volumes of the RFS cannot be met because of the so-called “blend wall.”

The EPA's proposal to waive the statutory renewable fuel volumes mistakenly accepts this logic. It ignores the potential for E15, E85 and biodiesel. It doesn't take into account the large surplus of RINs, which could be used in 2014 and it does not factor for increased gasoline demand. And, most fundamentally, it does not follow Congressional intent in creating the RFS program. The program was designed to spur investment in renewable fuels, not to punish those who have invested while rewarding those who have impeded development.

Since the RFS' inception, the ethanol industry has produced ample biofuel to meet the statutory obligations of the RFS and it has ample capacity to do so again in 2014. With this proposal, EPA is waiving the statutory volumes – including, for the first time, the total renewable fuel volume – on the grounds that there is insufficient demand for higher-level blends, notwithstanding the fact that the oil

industry has refused to give consumers a choice at the pump. The statutory volumes can easily be met if the oil industry would simply comply with the original intent of the RFS and allow higher ethanol blends like E15 to be competitively sold to consumers.

While some have claimed that the infrastructure is not in place to dispense ethanol blends above 10 percent, that is simply not the case. The vast majority of gasoline dispensing equipment made since 2008 is warranted for ethanol blends as high as E15 and underground storage tanks made in the last 20 years are equipped to handle blends up to 100 percent ethanol. As for the market, nearly 80 percent of the vehicles on the road today are approved by EPA for E15 and there are over 16 million flex-fuel vehicles that can consume even higher blends – up to and including E85. Also, EIA recently increased its gasoline demand estimates indicating 2.1 to 2.9 million gallons of additional use per day, which means even more ethanol can be blended as E10. Clearly there is the capacity and ability to push through the so-called “blend wall” – now is not the time to retreat from the goals of the RFS.

This proposal would also jeopardize the tremendous success our nation’s farmers have seen as a result of the certainty of the RFS with net farm income increasing by 51 percent while federal farm payments have decreased 57 percent.

Similarly, the proposal directly threatens an American-made biofuels industry at a time when our nation can least afford to lose jobs. Companies from all over the world have invested billions of dollars in first and second generation biofuels in the U.S. and are poised to do more. Arbitrarily reducing the levels established in the statute threatens investments that are making commercial production of cellulosic ethanol a reality – projects that will help achieve the significant greenhouse gas reduction goals outlined in the RFS.

EPA should move the RFS forward, not backward. EPA should not reduce the total renewable fuel volume below the level that provides for 14.4 billion gallons of conventional ethanol and attainable domestically produced advanced biofuel levels.

Environmental Benefits of Biofuels

The RFS has been one of the most successful energy policies of the last 40 years. It is reducing greenhouse gas emissions, reducing our dangerous dependence on foreign oil and creating American jobs. EPA estimates that by 2022, the RFS will reduce greenhouse gas emissions by 138 million metric tons or the equivalent of taking 27 million passenger vehicles off the road. In particular, studies show that traditional corn ethanol reduces greenhouse gas emissions as much as 59 percent compared to gasoline (*Improvements in Lifecycle Energy Efficiency and Greenhouse Gas Emissions of Corn-Ethanol*, Liska et al., which can be found here: <http://onlinelibrary.wiley.com/doi/10.1111/j.1530-9290.2008.00105.x/abstract>).

As we move to the next generation of biofuels, greenhouse gas emissions will be even further reduced. Recent studies have shown that using switchgrass and corn stover to produce cellulosic ethanol will reduce greenhouse gases as much as 94 percent and over 100 percent respectively (*Energy and Greenhouse Gas Emission Effects of Corn and Cellulosic Ethanol with Technology Improvements and Land Use Changes*, Wang et al., which can be found at <http://www.sciencedirect.com/science/article/pii/S0961953411000298>).

The long-term certainty of the RFS has driven significant investment in the next generation of biofuels and new technologies both in ethanol production and in agriculture. By increasing yields, increasing efficiency, and deploying new technologies, ethanol and agriculture production continues to soften its footprint on the environment – particularly as fossil fuels like crude oil and natural gas become harder and harder to extract. Just in the past four years, we have seen significant results - we are producing more ethanol for each bushel of corn (2.82 gallons/bushel in 2012 vs. 2.78 gallons/bushel in 2008), using less water (2.70 gallons of water per gallon of ethanol in 2008 vs. 2.72 gallons of water per gallon of ethanol in 2012), and are using less energy to produce a gallon of ethanol (23,862 BTU/gallon in 2012 vs. 26,208 BTU/gallon in 2008) (Mueller and Kwik, *2012 Corn Ethanol: Emerging Plant Energy and Emerging Technologies*, http://www.erc.uic.edu/PDF/mueller/2012_corn_ethanol_draft4_10_2013.pdf).

Additionally, some of these newer technologies will be “bolted-on” to existing biofuel production to take advantage of current power and resource streams – maximizing efficiency and driving greenhouse gas emissions down even further. Only by keeping this policy in place will we continue to see this type of investment in more efficient systems to improve our environment.

How the RFS Has Revitalized Rural Economies

The RFS has had a tremendous positive impact on rural communities and the agriculture sector. Since the enactment and implementation of the RFS, net farm income grown by 51 percent from 2005 to 2011 helped in part by the RFS. The RFS also supports 400,000 jobs and more than \$40 billion in economic activity.

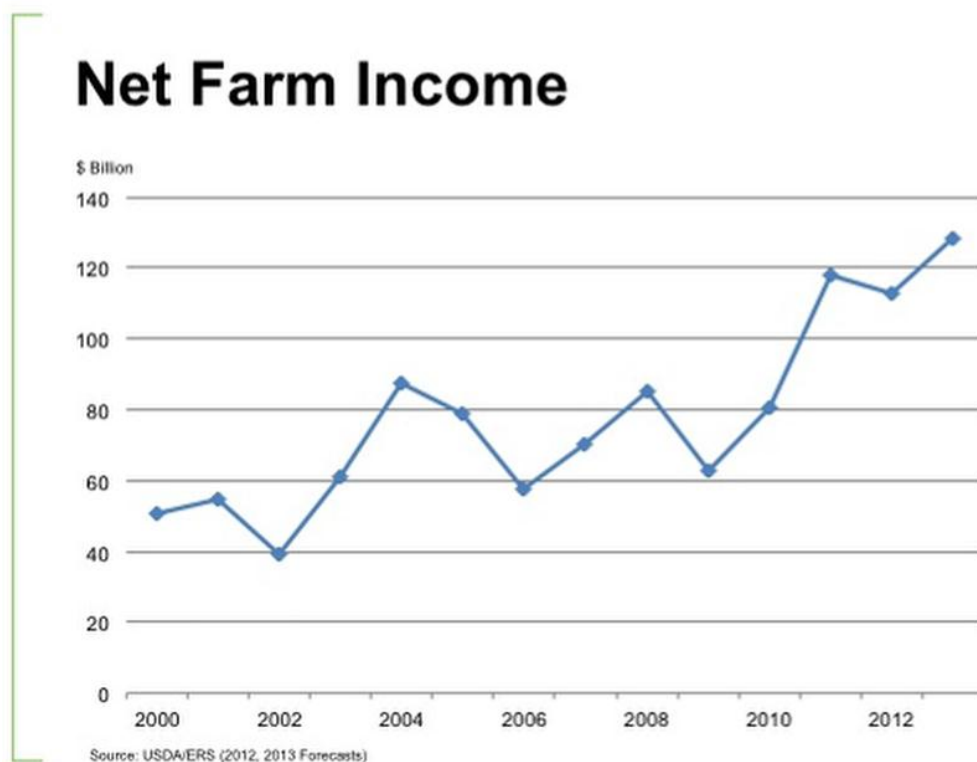


Figure 1

In addition, renewable fuels have helped create a balance in supply and demand for crop commodities that has alleviated the need for most forms of government payments and created a market-based, rather than a government-based, agricultural economy. This in turn has driven farmers to utilize new technology and soil resources to produce crops. According to USDA, since 2004, planted acres of corn have increased from 80.93 million acres to 97.28 million acres for 2013. Harvested corn acres increased from 73.63 million acres in 2004 to 87.38 million acres in 2012. Similarly, production has driven technology and efficiency – since 2000, corn yields have gone from 137 bushels per acre up to 153 bushels per acre in 2010. Likewise, taking an example from the poultry industry, USDA shows that turkey production was \$2.89 billion in 2004 increasing to \$4.99 billion in 2013. These figures prove the RFS has, and will, continue to drive growth across all of American agriculture.

Like any commodity, the market responds to natural forces such as supply and demand. The market for corn is no different. While the RFS has created additional demand for corn, more importantly, it has driven additional corn production that otherwise would not have occurred while producing significant quantities of co-products that are substitutes for starch used in ethanol production. For decades, farmers were paid far less than the price of production for their corn, and the American taxpayer heavily subsidized the price. Last year, ethanol critics alleged the RFS caused prices to rise more than \$8 per bushel, when, in fact, the price increase was a direct result of one of the worst droughts in our nation's history. In fact, those purchasing corn could have locked in prices for under \$5 per bushel as late as June 2012. Today, the price of corn is \$4.36 per bushel. The RFS has tools built in that allow states to waive the RFS in cases of severe economic harm. Twice, states have petitioned EPA to waive the RFS and both times, the petitioners have failed to make the case.

A final point that should not be overlooked concerns the taxpayer savings from reduced farm program payments that have occurred as the RFS has been implemented. According to data from the Congressional Budget Office, the average federal farm program payments to corn producers averaged over \$4.4 billion per year for the 2002 – 2006 crop years. Corn payments averaged about \$1.9 billion per year from 2007 to 2011, a reduction in taxpayer costs of almost 57 percent.

Biofuel Production's Limited Impact on Food Price

There are many factors that had an impact on food prices, including crop production shortfalls and increased demand overseas. On June 26, 2013, Dr. Joseph Glauber, Chief Economist at the United States Department of Agriculture testified before the Subcommittee on Energy and Power of the House Committee on Energy and Commerce that the total impact of changes in the corn market on retail food prices was small. This is consistent with prior analysis done by USDA, the World Bank and many others.

Countless academic, economic and government studies have disproven the misplaced notion that biofuels production has increased the cost of food. These studies have instead found that record-high oil prices, Wall Street speculators and the high costs of manufacturing, packaging and transportation have far more impact than ethanol on everyday grocery prices. There is no substantial link between ethanol production and grocery prices. Despite the proven facts, misinformed critics still actively try to stoke illegitimate fears that demand for ethanol will somehow drive up food prices.

Corn is only a fraction of overall food and grain costs. For every \$1 spent at a grocery store, 85.9 cents go to marketing, which includes labor, transportation, energy, and packaging costs. Just 14.1 cents are

associated with farm costs — of that, only 3 cents are associated with the value of corn. The USDA forecasts that the price of food will increase by 3.5 percent in 2013, slightly above historical inflation averages of approximately 3 percent per year. Food prices rise when oil prices rise. The price of food is driven up by transportation and packaging — not by renewable fuels like ethanol. Food processing is energy intensive, and packaging frequently uses petroleum-based raw materials. Transporting food worldwide also requires large amounts of fuel and subsequently large amounts of oil.

Your Dollar at the Grocery Store

Food Price Increase: What's the Real Story?

Important food items like bread, eggs and milk have high prices that are largely unrelated to ethanol or corn prices, but correspond to fundamental supply/demand relationships in the world.

The farm share of the food dollar is the share received by farmers from the sales of raw food commodities. The marketing share includes other costs like labor, transportation, energy and packaging.

3¢ CORN VALUE



SOURCES: ERS/USDA, Industry Analysis

Figure 9

Contrary to the unsubstantiated opinions of those who would repeal the RFS, the chart below graphs the Consumer Price Index from 2005 to May, 2013 for all items, food, and gasoline. This clearly demonstrates that gasoline prices have played a far bigger role in rising consumer prices than food costs.

Consumer Price Index 2005 – May 2013

(1982-84 = 100)

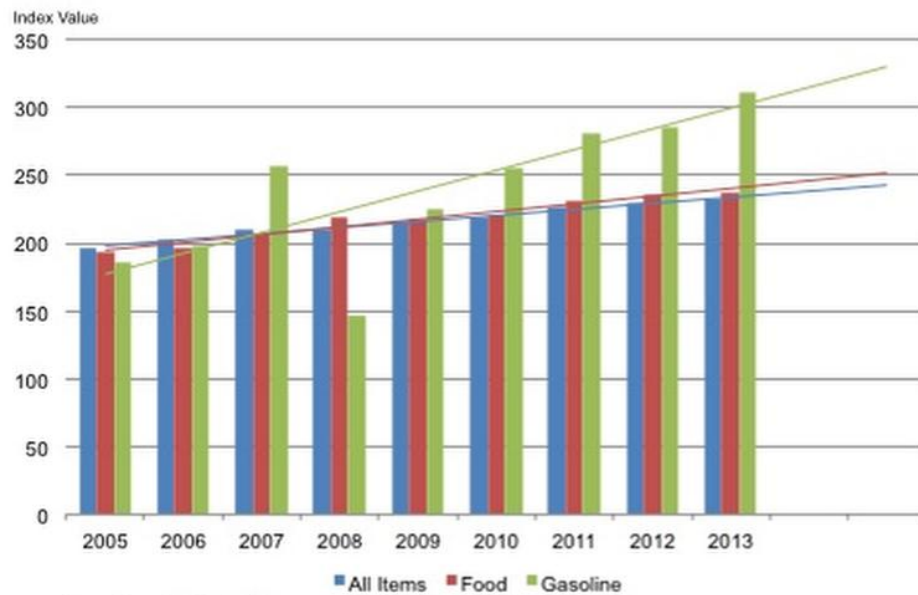


Figure 10

Since 2005, the CPI for food has increased about 18.3 percent, roughly in line with the CPI for all items including food and gasoline which rose by about 16 percent. The index for gasoline increased by nearly 40 percent and in recent years, the trend has followed a very steep upward path. Interestingly, this is occurring as we have increased the amount of ethanol blended into our gasoline supply which every credible analysis has concluded that consumer gas prices would be even higher if it were not for ethanol holding prices down.

These three charts that graph the prices spreads between retail, wholesale, and farm values help provide the answer. Farm values for choice beef, pork, and broilers – the primary livestock products demanded by consumers – have risen somewhat over the last decade. For the most part, wholesale values have paralleled the upward movement of farm values. However, the retail – wholesale/farm price spread has increased at a much faster rate.

Choice Beef Values: 2002-13

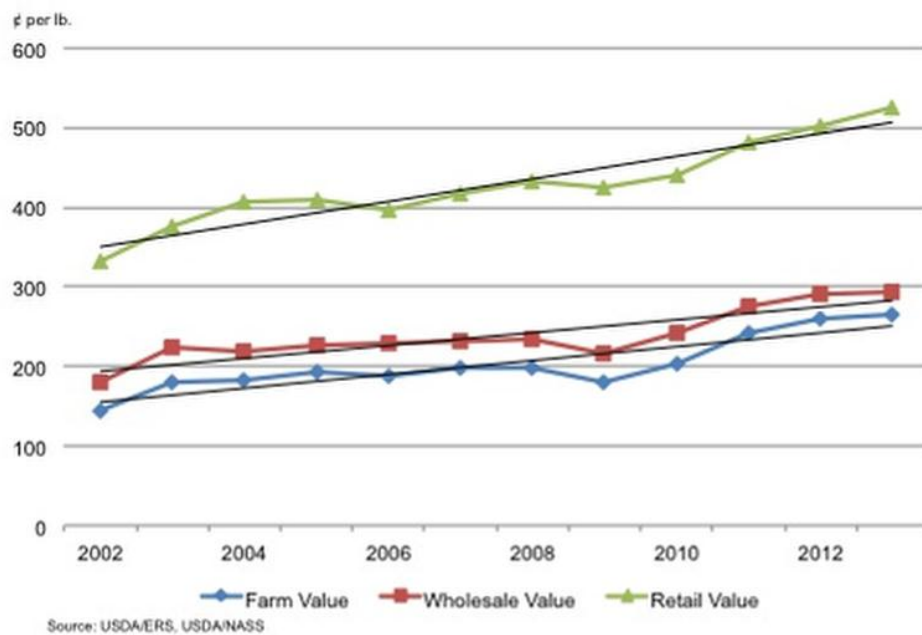


Figure 2

Pork Values: 2002-13

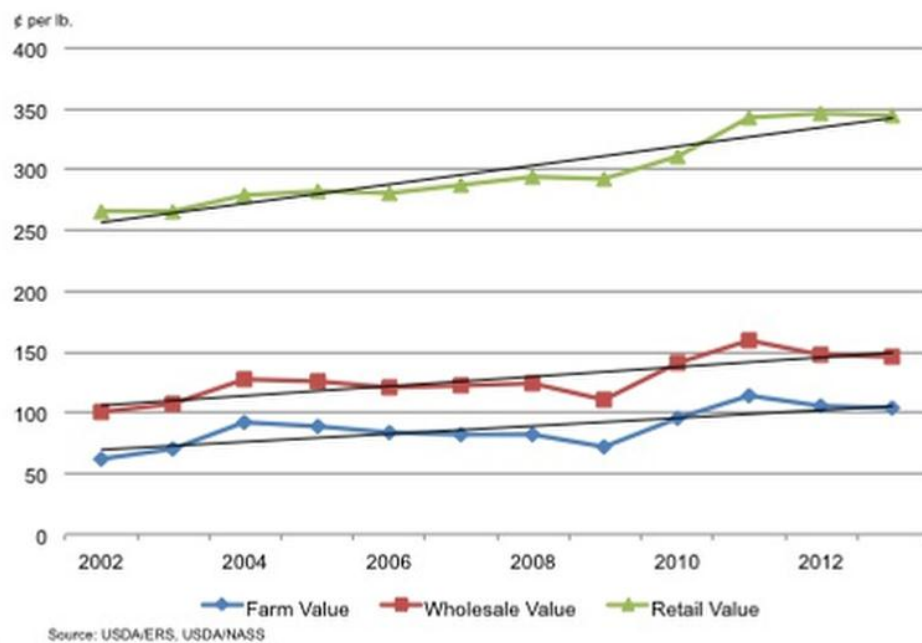


Figure 3



Broiler Values: 2002-12

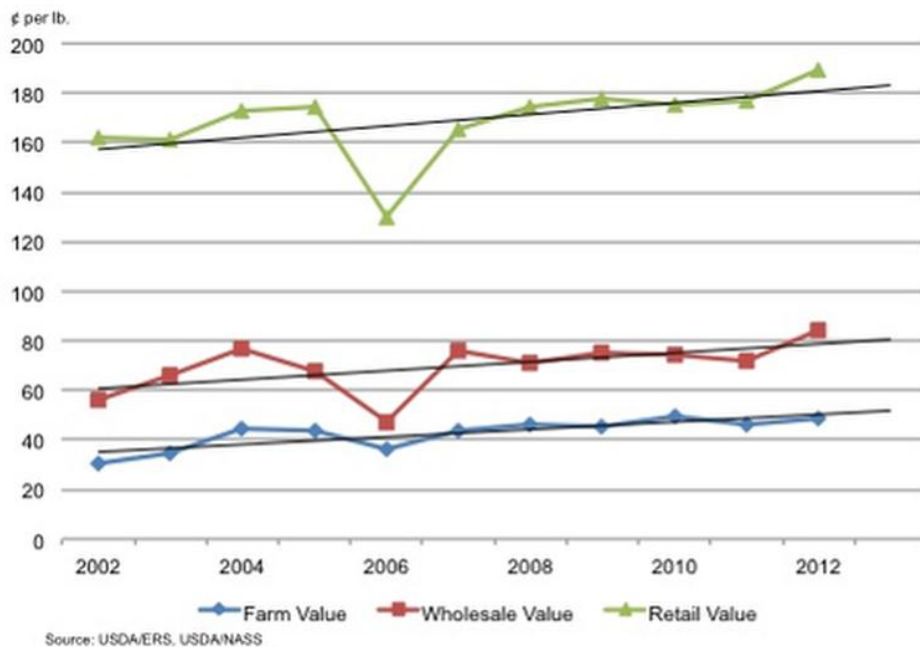


Figure 4

The primary cause of increased consumer prices rests not with livestock producers or those who process their products, but with the same food companies who are complaining about the RFS. According to the World Bank, over 50 percent of the global increase in food prices is due to energy costs and for the U.S. the increase in the retail prices spreads suggest that either energy costs and other non-farm cost factors are being passed on to consumers or retained by the food companies as increased profit margins.

How the RFS has Helped Livestock Producers

Biofuel production only removes the starch from the corn. The protein, fiber, and oil is returned to the animal feed supply in the biofuel feed co-product known as distiller's grains. Distillers grains amount to one-third of the corn used in ethanol production. According to USDA, 80 percent of the calories from the decline of corn-based livestock feed have been returned to the livestock industry in this form. Distiller's grains also replace soybean meal in feed rations, meaning there is less demand for soybeans, requiring fewer acres planted to soybeans.

Distiller's grains feed cattle, hogs, poultry and other animals around the world. American farms can create food and fuel. In fact, the ethanol industry produced 38.8 million tons of distiller grains just last year, the weight equivalent of nearly 1.4 billion bushels of corn and almost 400 aircraft carriers.

American corn growers have demonstrated they have more than enough capacity to satisfy all demand for livestock feed, exports, and ethanol. Because of new technology that allows farmers to grow more crops on fewer acres of land, corn farmers are poised to increase plantings even more to take advantage of the growing market for renewable fuels. On July 11, USDA pegged this year's corn crop at 14 billion bushels.

One of the biggest myths perpetuated by those who dislike the RFS is that 40 percent of the corn crop goes to biofuels. This is not only wildly false, it is completely misleading.

As the chart shows, only 17.5 percent of net corn acres are used for renewable fuels. Actual “net acres” used for ethanol are less than 50 percent of gross acres. Only the starch is used for ethanol. Distiller’s grains displace corn and soybean meal. Corn yields are three times soybean yields.

~~Forty percent of the corn crop goes to ethanol~~

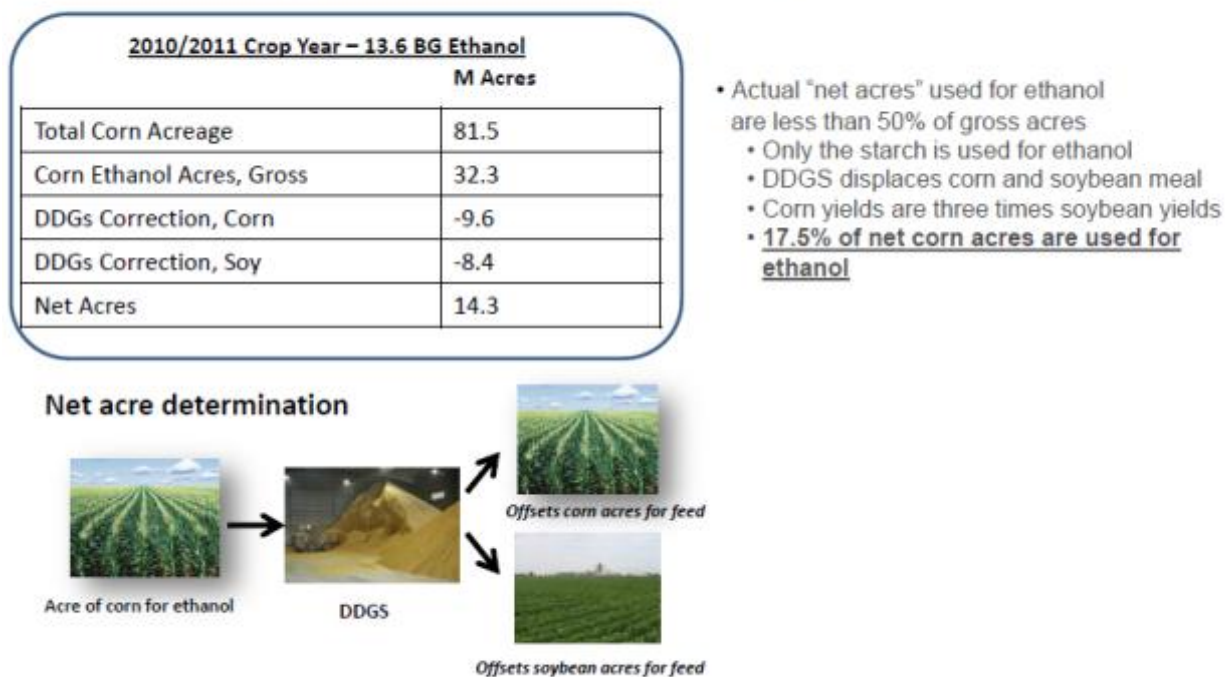


Figure 5

In the fall of 2012, Growth Energy provided comments to the EPA in response to requests to waive the RFS from various state governors. In those comments, we demonstrated that waiving the RFS would jeopardize farmers, rural jobs and economies and would increase consumers’ prices at the pump. Specifically, we estimated that waiving the RFS could result in up to \$7.8 billion in lost revenue and a reduction of 8,300 jobs lost in ethanol producing areas. Additionally, waiving the RFS would result in a \$7.5 billion a year cost to consumers through higher fuel costs and between \$5.8 and \$27 billion losses to American farmers. Finally, companies have already spent billions of dollars building facilities, harvesting cellulosic materials and planning on the certainty of a 15 year RFS program as they ~~move to~~ prepare to produce the next generation of biofuels.

In fact, USDA estimates that the corn demand lost from 2011 to 2012 due to the drought was far greater for ethanol than livestock feed. The demand lost from the ethanol industry was more than 350 million bushels from 2011 to 2012, while the demand lost from animal feed was less than 100 million bushels. And with a 14 billion bushel crop projected this year (compared to last year's 10.7 billion bushel crop), corn demand for animal feed is projected to increase by 16 percent to 5.2 billion bushels, while corn demand for ethanol production is projected to increase by 5 percent to 4.9 billion bushels.

Despite overwhelming data, some leaders in the livestock and poultry industry have blamed ethanol for rising feed costs and declining profit opportunities throughout the livestock production sector. The difference between the total value of U.S. livestock and poultry production and the cost of feed is increasing, not declining. In fact, for the seven years prior to the enactment of the RFS, the margin averaged \$83.4 billion per year. In the seven years since RFS became law, the margin has increased by nearly 18 percent to an average of \$98.2 billion per year.

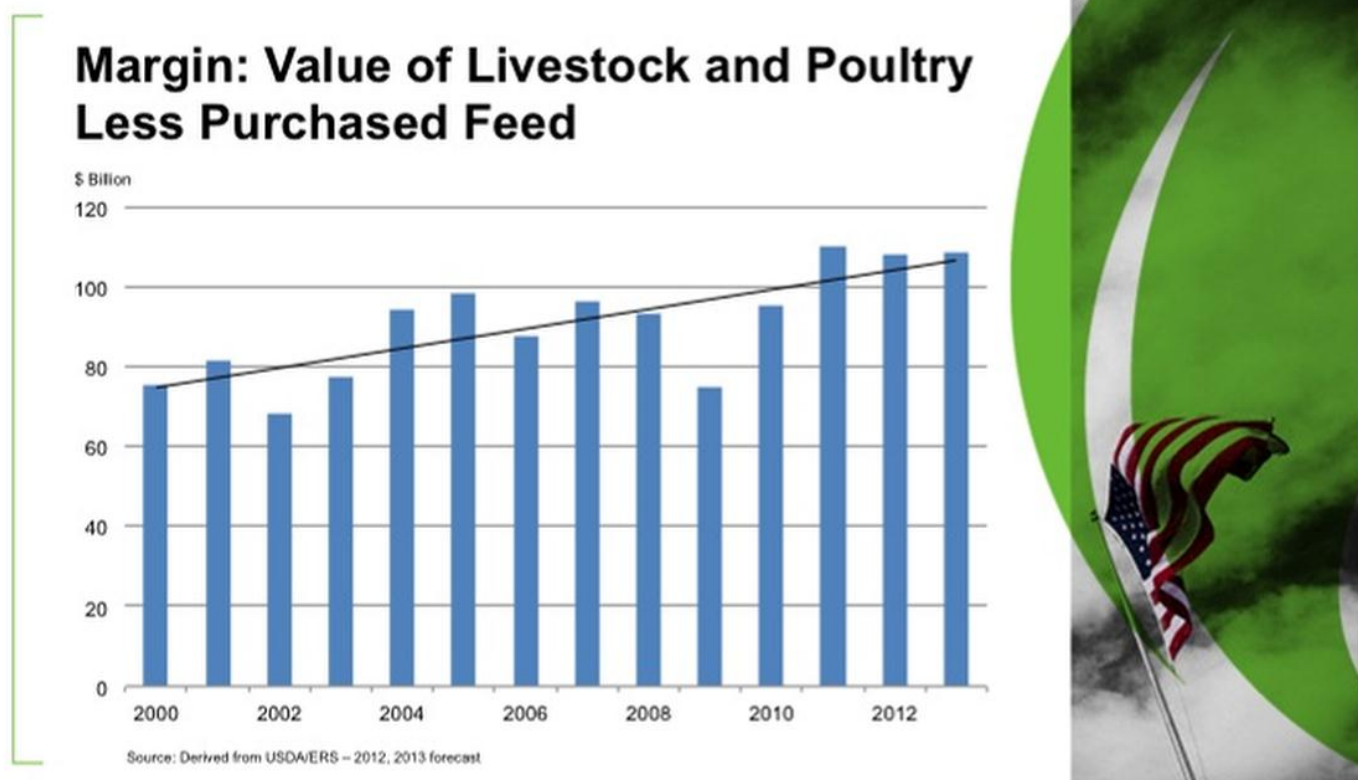


Figure 6

This chart shows what has happened to the production of the four major livestock categories – beef, pork, broilers and turkey over the 2003-14 period. To its credit, the livestock industry has become far more efficient in managing their animal feeding operations and contrary to the claims of some, livestock production has in fact increased by about 5 billion pounds over the period charted.

Livestock Production: 2003-14

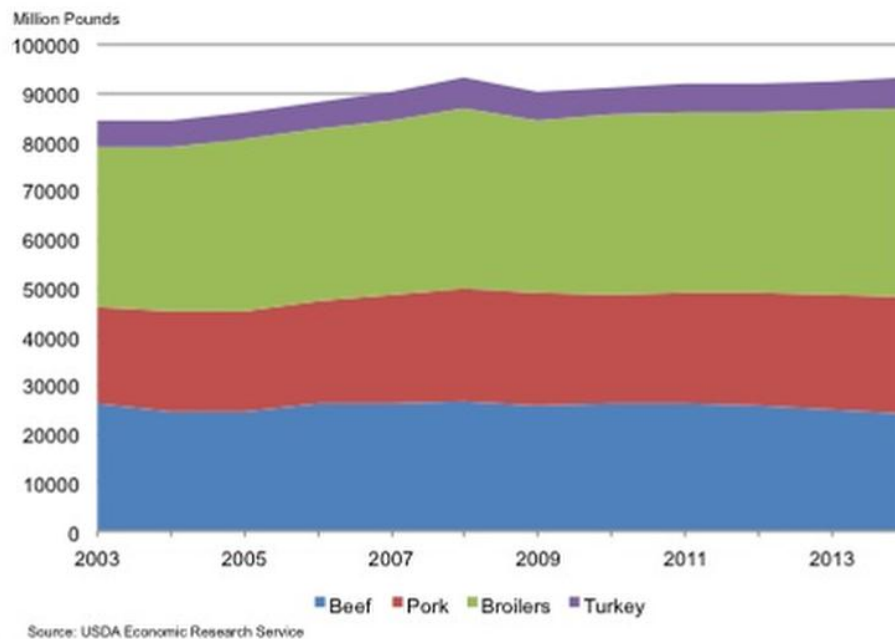


Figure 7

When prices are viewed in conjunction with production, one must question the veracity of the statements by those who suggest the RFS is causing the demise of the U.S. livestock industry. Not only has livestock production increased since enactment of the RFS, but prices for beef, pork, broilers and turkey have also risen compared to the years prior to the RFS.

Livestock Prices Received: 2003-14

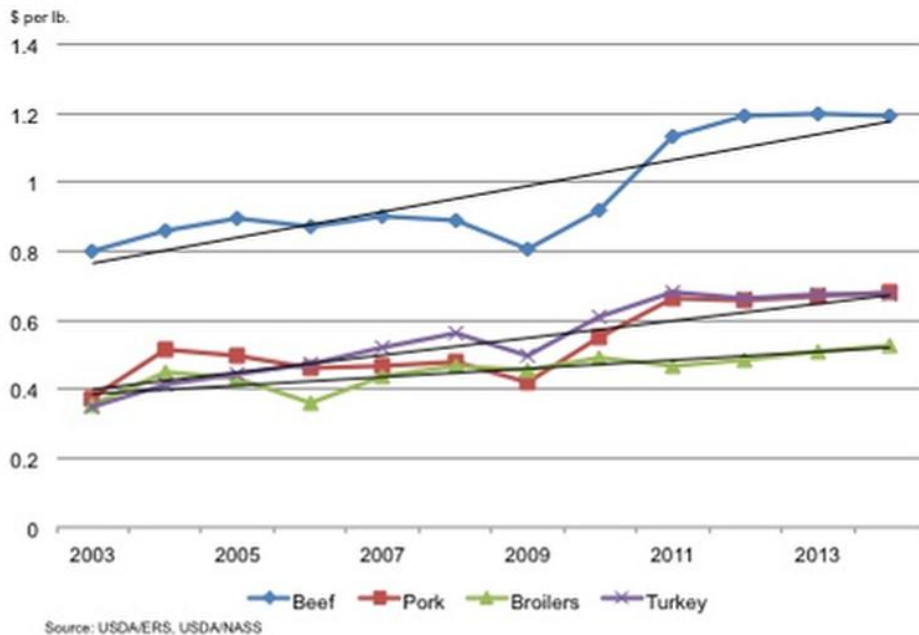


Figure 8

To summarize these charts: livestock production is up, livestock prices are up, and the margin between livestock values and the cost of feed has grown appreciably all since the RFS was enacted. This hardly paints a picture of an economically distressed U.S. livestock sector.

The So-Called “Blend Wall”

Recently, the oil industry has falsely blamed the Renewable Fuel Standard as the cause of higher gasoline prices. These stories revolve around a false premise — that prices for a RFS compliance mechanism demanded by the oil industry when the RFS was first passed into law – Renewable Identification Numbers (RINs) – are responsible for the increase in domestic gasoline prices.

Many have termed this the “blend wall,” and breaking the blend wall is vital to the success of the RFS. With ethanol consistently trading at a significant discount to wholesale gasoline, oil at nearly \$100 a barrel and gasoline selling for more than \$3.25 per gallon, it makes little sense to prevent E15 and even higher ethanol blends into the market. With the RFS goal of 36 billion gallons of renewable fuel by 2022, it was clear higher blends of ethanol would be required regardless of the level of fuel consumption. However, other than the use of ethanol to blend E10, the oil industry has done nothing but erect hurdles to higher blends of ethanol and now their publicly-stated goal to completely eliminate the RFS altogether.

The charge that RIN prices are the cause of higher gas prices is objectively false. RINs for ethanol are provided free of charge to oil companies when they blend ethanol. Any added value comes from trading RINs in an opaque marketplace between oil companies. Ethanol has consistently been trading — and will

likely continue trading — significantly cheaper than gasoline. Recently, wholesale ethanol has been up to \$1.00 per gallon less expensive than wholesale gasoline.

RIN prices are increasing because of refiners' unwillingness to blend ethanol and instead are willing to pay a premium specifically not to blend additional ethanol. Meanwhile, oil companies are currently making record margins. EPA has specifically said there is not a shortage of RINs for 2013. In fact, there are more than 2.6 billion carry-over RINs from 2012. The simple solution to this problem is to adopt the higher level ethanol blends such as E15. As soon as the oil companies adopt the higher blends, plenty of RINs will become available and the price for those RINs will likely decrease significantly based on lower demand. The oil industry has erected hurdle after hurdle to E15 and mid-level ethanol blends and continue to fight to try and eliminate the RFS. By refusing to sell higher ethanol blends, the oil companies only maintain the status quo: high gas prices for the consumer and record profits for the five largest oil companies.

The RFS continues to call for increasing amounts of biofuel to be blended into the country's fuel supply. However, there are market limitations put in place by the oil industry effectively "capping" the amount of renewable fuel that can be blended. This creates overproduction in a saturated fuel market.

The Volumetric Ethanol Excise Tax Credit (VEETC) was designed to provide a financial incentive to provide ethanol blenders – not ethanol producers – to blend ethanol and make sure the blend wall didn't occur. The primary recipients of this incentive were integrated oil companies. VEETC paid out tens of billions of dollars before it expired at the end of 2011 to help these integrated oil companies upgrade their distribution network to meet the future need for higher inclusion rates of ethanol.

E15 is Safe and Ready for Use

When the RFS was first created, it was apparent that our nation's energy infrastructure and economy needed a wider market for renewable fuels. Even under fuel use assumptions in 2007, when the RFS was expanded, higher-level ethanol blends like E15 would be required in order to meet the volumes contained in the statute. Unfortunately, the oil industry has decided to erect every public relations, legal and regulatory hurdle possible to avoid marketing fuel containing more than 10 percent ethanol. Instead of working to accommodate fuel choice for consumers, the oil industry has chosen to try to shut out competing fuels from their vertically integrated monopoly.

Because the oil industry continues to stifle fuel choice at the pump, most consumers don't have access to E15. In those fueling stations where retailers have decided to offer E15 despite pressure by the oil industry, we have seen robust sales. This is because E15 is less expensive, safe for use, and high-performance.

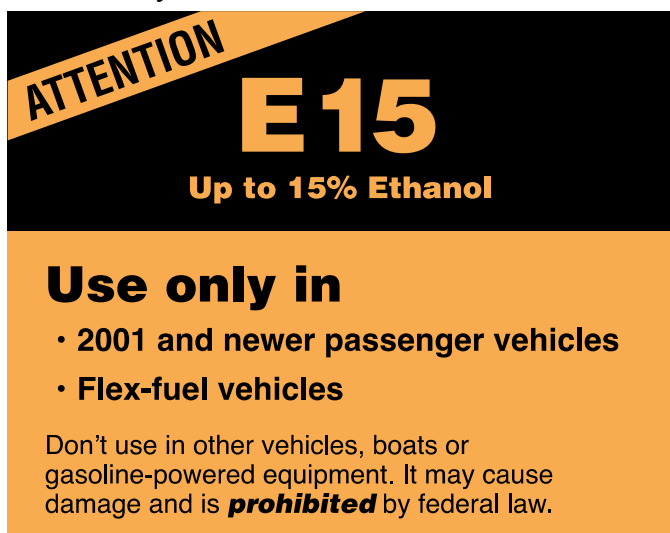
More than four and a half years ago, Growth Energy led the way by filing a waiver with the U.S. EPA to allow the sale of ethanol blends up to E15 beyond the current 10 percent ethanol in today's current fuel supply. By moving the nation to E15, we will further constrain the price at the pump, add 136,000 new American jobs, limit greenhouse gas emissions even more and reduce the demand for gasoline produced from foreign oil by up to 7 billion gallons. In addition, E15 would reduce the use of aromatics in gasoline, which are petroleum-derived fuel components known to harm human health.

When Growth Energy filed the original waiver for E15 with the U.S. EPA, we sought approval for all gasoline-powered engines and provided ample data to demonstrate the fuels' safety and efficacy. The Department of Energy chose to narrow their specific testing by putting E15 on a path for approval for only 2001 and newer vehicles. More testing was done on E15 than any other fuel ever approved by EPA under the Clean Air Act, with the Department of Energy (DOE) testing 86 vehicles for a total of 6 million miles. DOE's testing found absolutely no issues with emissions equipment or with engine durability. With DOE's data in hand, the EPA ultimately approved our waiver in January 2011 for all 2001 and newer passenger vehicles – more than 80 percent of the vehicles on the road today. In fact, Ford, General Motors and other auto manufacturers have already started labeling their vehicles as approved for E15 – General Motors for model years 2012 and 2013, Ford for model year 2013. Further, NASCAR has been running on E15 for 3 years for a total of 5 million miles in some of the world's toughest driving conditions and they have experienced an increase in horsepower, no mileage loss or mechanical problems suggesting that E15 is more than safe for use in everyday automobiles.

Many other criticisms of E15 have been made with no scientific basis whatsoever. For example, an oil industry funded-study of E15 by the Coordinating Research Council (CRC) is significantly flawed with DOE publicly releasing a direct response entitled “Getting It Right: Accurate Testing and Assessments Critical to Deploying the Next Generation of Auto Fuels” (<http://energy.gov/articles/getting-it-right-accurate-testing-and-assessments-critical-deploying-next-generation-auto>). First, the CRC was extremely limited – only testing eight vehicles while the DOE tested 86. CRC also failed to test the engines on E10, the standard consumer gasoline found throughout the United States. CRC only tested 3 of the 8 vehicles on ethanol free gasoline and even one of those failed. CRC also chose two engines that had existing durability issues – one of which had even been recalled. The test was also specifically designed to stress the engine valve train. To sum up their findings, DOE said, “We believe the [CRC] study is significantly flawed.” DOE's findings were recently validated by the National Renewable Energy Laboratory (NREL)

It should be made clear that E15 is a voluntary choice both for retailers and for consumers. Fuel retailers should not face any significant incremental risk for offering E15, assuming they follow the misfueling mitigation rules. In addition, the decision to offer E15 is voluntary based on a retailer's assessment of return on invested capital, customer mix, and retail station configuration.

For small engines, marine applications, and gasoline engines other than 2001 and newer passenger vehicles, the law explicitly prohibits E15. Further, the EPA has issued a specific rule to mitigate consumer misfueling, including a label specific to E15. In fact, ethanol is the only fuel that requires a warning label at the pump. Additionally, ethanol is the only ingredient labeled in gasoline even though gasoline is a chemical cocktail which contains more than 200 different components some of which can pose serious health hazards.

A graphic of a fuel label for E15. The top half is black with a yellow diagonal banner on the left that says "ATTENTION" in black. To the right of the banner, "E15" is written in large yellow letters, and "Up to 15% Ethanol" is written in smaller yellow letters below it. The bottom half is yellow with the text "Use only in" in bold black, followed by a bulleted list: "• 2001 and newer passenger vehicles" and "• Flex-fuel vehicles". At the bottom, in smaller black text, it says "Don't use in other vehicles, boats or gasoline-powered equipment. It may cause damage and is **prohibited** by federal law."

Finally, there is no credible data to suggest that fueling with E15 would damage these small engines. The volume of fuel consumed by marine engines is only a small part of the U.S. gasoline demand – 130,000

barrels per day versus 8.46 million barrels per day of total gasoline consumption in 2011. Additionally, several manufacturers are manufacturing lawn equipment built to run on ethanol blends up to 85 percent. It makes no sense to make policy decisions that could deny the majority of U.S. drivers' access to cheaper, cleaner ethanol in order to accommodate a tiny fraction of fuel users who will have fueling alternatives readily available.

Conclusion

The RFS is a policy that is working. The EPA proposed EPA rule is troubling because it would chill investment in biofuels, reward deliberate and willful resistance to the law, and encourage further and more intensive efforts to gut RFS in the years ahead. This proposal will cause harm to farmers, the biofuels industry, American drivers, the environment, and our nation's economy.

The key to reducing prices at the pump and providing consumers real choice is to inject competition into the transportation fuel sector. The RFS does just that. If our goal is to reduce greenhouse gas emissions, the only statute that has required GHG reductions is the RFS. If our goal is to expand American made energy, the RFS is a solution. If we want to reduce foreign oil imports, the RFS is working.

The bottom line is that this is a policy that benefits all Americans. With oil prices at nearly \$100 a barrel and gasoline continuing to be above \$3.25 a gallon, we can no longer afford to be 90 percent dependent on fossil fuels.

I thank the Committee for allowing me to testify and look forward to any questions.